

VERSION WITH MARKING TO SHOW CHANGES MADE

gear 31 which is fixed on ⁻⁷⁻the extension 29 and three identical planet bevel gears 32, 33, 34 which are fixed on three radial output shafts 35, 36 and 37, respectively. Each of the planet bevel gears 32, 33, 34 is engaged with the sun bevel gear 31 at right angle with a one-to-one ratio. The radial output shafts are disposed substantially 120 degrees from each other. Each radial output shaft is mounted in two bearings 38 and 39 which are mounted in the housing 26 and on the central hub 27, respectively. The radial output shafts 35, 36, 37 extend out of the planetary gearbox through sealing elements 40. Three propelling means 41, 42 and 43 are affixed to the ends of the radial output shafts 35, 36, 37, respectively. They are disposed perpendicular to the axes of the radial output shafts and extend in two opposite directions from that shafts. Each of the propelling means 41, 42, 43 includes a propeller blade 41a, 42a or 43a which is balanced by one of the counter-weights 41b, 42b or 43b relative to one of the axes of the radial output shafts 35, 36, 37, respectively. The centers of gravity of the propelling means 41, 42, 43 are disposed on the axes of the radial output shafts 35, 36, 37, respectively. Three propeller means 41, 42, 43 disposed 120 degrees from each other are also balanced relative to the axis of the driving shaft 21.

The propeller blades 41a, 42a, 43a are substantially flat and are disposed in the planes of rotations around the radial output shafts 35, 36, 37, respectively, or at acute angles ["a"] ~~-α-~~ with that planes. Preferably, they have airfoil cross-sections in these planes to reduce a resistance in the water during rotations around the radial output shafts. The gearbox 15 and the planetary gearboxes 24, 25 can be filled with a lubricating oil.

Those skilled in the art understand that the engine case extension 16 can be of any desired shape and size and the gearbox 15 can be mounted on that case extension at such a height that the driving shaft 21 and the planetary gearboxes 24, 25 will be disposed under the water level or over the water level.

In the operation, the planetary gearboxes 24, 25 are rotated by the driving shaft 21 in the direction of arrow R. Simultaneously

intercrossed lines which are substantially perpendicular to the axis of said support rod and to each other, two pairs of said propelling means being mounted on said [for] four radial output shafts, wherein:

- said planes of rotations of one pair of said propelling means around said radial output shafts are substantially perpendicular to said planes of rotations of another pair of said propelling means around said radial output shafts[.];

- said planetary gearbox includes a sun bevel gear mounted on said support rod, at least one planet bevel gear engaged with said sun bevel gear and four identical bevel gears engaged with each other.

17. The propulsion apparatus of claim 15, wherein said support rod is disposed substantially horizontally in such a height over the water level that said fluid moving means extend into the water when they are orientated generally downwards.

18. The propulsion apparatus of claim 15, wherein said planetary gearbox is rotated by an outer rotor type brushless electric motor, including:

- at least one inner stator secured to said support rod;
- at least one outer rotor disposed coaxially with said support rod and secured to said planetary gearbox.

19. The propulsion apparatus of claim [15] 18, wherein:

- said inner stator includes a plurality of protrusions serving as cores for electrical coils;

20. The propulsion apparatus of claim 15, wherein:

- said outer rotor comprises a plurality of permanent magnets disposed on inside surface of said outer rotor.